EPA's Framework for Community-Based Environmental Protection DRAFT DRAFT DRAFT **April** 1998 United States Environmental Protection Agency

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LIST OF ACRONYMS

CBEP Community-Based Environmental Protection

CEIS Center for Environmental Information and Statistics

CLC CBEP Leadership Committee

ECOS Environmental Council of the States
GIS Geographic Information System

GPRA Government Performance and Results Act

NEPPS National Environmental Performance Partnership System

NPM National Program Managers NGO Non-Governmental Organization OA Office of the Administrator

OAR Office of Air and Radiation

OARM Office of Administration and Resource Management

OCFO Office of the Chief Financial Officer

OCLA Office Congressional and Legislative Affairs
OECA Office of Enforcement and Compliance Assurance
OIRM Office of Information Resource Management
OPPE Office of Policy, Planning and Evaluation

OPPTS Office of Prevention, Pesticides, and Toxic Substances
OR Office of Reinvention/Office of the Administrator

ORD Office of Research and Development

OSEC Office of Sustainable Ecosystems and Communities
OSWER Office of Soid Waste and Emergency Response

OW Office of Water

RGI Regional Geographic Initiative

PART I: EPA's Community-Based Environmental Protection Framework

I. Introduction

In the last 25 years, the United States has seen enormous improvements in environmental quality as a result of federal, state and local actions to reduce the level of pollutants in the nation's air, water, and on land. This success has been achieved primarily by controlling point sources of pollution and cleaning up and preventing contamination from hazardous waste sites on a governmental program-by-program basis. While such sources of pollution continue to be environmental threats, the existing and potential causes of environmental pollution and ecological degradation today - non-point source water pollution, redevelopment of hazardous waste sites, urban sprawl and the decline of biological diversity, to name just a few - cannot be effectively solved only through traditional, compartmentalized, command and control approaches.

Many of today's environmental problems must addressed by public and private stakeholders coming together within a place or community and taking a holistic and collaborative approach to identifying environmental concerns, setting priorities, and forging comprehensive solutions. In working together, stakeholders within a place can assess the range of environmental risks along with human social needs, and develop solutions that help to sustain economic prosperity and environmental well-being.

In order to support the nation's communities in their efforts to address environmental concerns, EPA will need to change its way of doing business. The purpose of this document is to provide EPA with a policy and planning framework for supporting and implementing community-based environmental protection (CBEP) over the next three years. The "CBEP Framework" addresses:

- what community-based environmental protection is and what it is not;
- what are EPA's community-based environmental protection goals;
- what strategies will EPA take in supporting and implementing CBEP;
- how will EPA choose which communities/places to work in; and,
- what and how will the Agency track and measure its performance in achieving its CBEP goals.

EPA's Approach in Developing the CBEP Framework

To date, the process for developing the Framework has involved two main elements: (1) developing a succession of draft Framework documents, and (2) holding a series of discussion sessions on each draft of the Framework with EPA employees at the Agency's Headquarters and selected Regional Offices. The purpose of this process has been to establish a means for EPA's CBEP managers, coordinators and other interested parties to discuss and provide input on each draft Framework document.

EPA recently completed an Agency-wide review of the draft Framework by EPA's senior managers. The current draft is to a great extent the result of the input received through this review process. EPA will conduct a formal external review of the Framework beginning in April. EPA will use a variety of means (e.g., focus groups) to obtain critical input on the Framework from federal agencies; state, tribal, and local governments; private organizations; and communities. EPA expects to have a final of the Framework document by September 1998.

II. What Is Community-Based Environmental Protection?

A. Definition of Community-Based Environmental Protection

Community-Based Environmental Protection (CBEP) is EPA's term for a holistic and collaborative approach to environmental protection that brings together public and private stakeholders within a place or community to identify environmental concerns, set priorities, and forge comprehensive solutions. Through CBEP, often called a place-based or ecosystem approach, stakeholders consider environmental protection¹ along with human social needs, work toward achieving long-term ecosystem health, and foster linkages between economic prosperity and environmental well-being. Through CBEP, communities² create a vision of environmental health and quality of life and pursue activities compatible with that vision.

B. Principles of Community-Based Environmental Protection

In a practical sense, CBEP is implemented in varying ways in different places, and by design, CBEP projects will have differing attributes to fit the needs of specific places. Because CBEP itself is so varied, EPA's role also is varied. CBEP can work with little or no direct EPA involvement, or with substantial EPA involvement. When EPA is involved, the Agency's role is defined by community needs and may range from being an active stakeholder and decision-maker, to simply being a source of information or funding. Although no one description can characterize all CBEP activities EPA undertakes, a number of key principles can guide EPA's and community stakeholders' efforts to implement the approach. The core principles of CBEP are:

¹The term "environment" as used in this document refers to humans as well as natural resources. As a result, "environmental protection" includes protecting the quality of human health.

² Intrinsic to CBEP is understanding "community". This document uses community in a very broad sense of the term. It includes, in general, components/attributes of social interaction, common ties, mutual satisfaction of needs and shared territory or place. More specifically, the document encourages practitioners to define and understand what is meant by community in any particular situation. As such, any "community" includes a variety of differing values, perceptions, priorities and complex inter-relationships around environmental protection as well as other community-based issues.

- Focusing on a definable geographic area. The boundaries of a geographic area can be based on the natural landscape, such as the land that drains to a river (a watershed) or specific types of ecosystems; or on social communities, including urban and suburban neighborhoods; or boundaries can be based on political subdivisions, such as a town, city, county, or a tribal land. In order for a CBEP approach to be fully effective, the geographic area would include the area of concern, and, whenever possible, address any source(s) of a problem.
- Working collaboratively with a full range of stakeholders through effective partnerships. The term "stakeholder" is generalized to mean the variety of people interested in a particular place, such as individual residents and landowners, civic and religious organizations, businesses and industry associations, environmental and conservation groups, governmental agencies at all levels, and others. CBEP requires an open, inclusive decision-making process that allows for a meaningful role for those who actively manage local natural resources as well as those potentially affected by their decisions.
- Assessing, protecting and restoring the quality of the air, water, land, and living resources in a place as a whole. Many environmental problems today could be better addressed by taking an integrated and systematic approach rather than focusing solely on one pollutant, concern, or natural resource. A basic assumption underlying the CBEP approach is that all the resources in a place are inter-connected parts of a system. CBEP encourages public and private stakeholders to assess the cumulative impacts of various human activities within a geographic area and identify and address the highest ecological and human health risks.
- Promoting sustainable communities and ecosystems by integrating environmental, economic, and social objectives. The CBEP approach seeks to ensure that governmental and stakeholder actions are consistent with the related goals of sustainable development: a cleaner, healthier, more resilient environment; a more equitable distribution of environmental burdens borne by different economic and social groups; and a more productive and efficient economy. Ultimate success for CBEP projects is defined by achieving tangible long-range environmental results that foster self-sustaining ecological processes as well as improvements in human health and quality of life.
- Taking public and private action using the most appropriate regulatory and nonregulatory activities to forge more effective solutions to community and regional concerns. The CBEP approach seeks to integrate regulatory, non-regulatory, and natural resource planning and management efforts. CBEP enables stakeholders within a geographic area to complement traditional governmental regulatory efforts by applying

a diverse array of innovative policy and management tools and approaches (i.e., training and education, assistance agreements, information sharing, and technical assistance).

• Monitoring and re-directing efforts through adaptive management. CBEP is an iterative approach that recognizes the need to continuously review the results of collaborative environmental protection efforts and appropriately revise and refine projects and partnerships to benefit from experience, new data, and advanced technology.

What Community-Based Environmental Protection Is Not

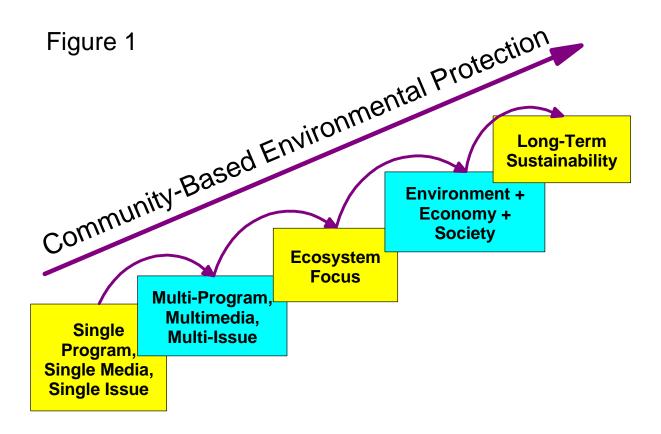
Community-based environmental protection can be carried out with varying levels of support and involvement from EPA. To avoid misunderstandings within EPA and among its partners, it is important to clarify for EPA's programs and activities what CBEP is not. It is:

- Not regulatory relief or a replacement of regulatory authority and base program activities. CBEP does not represent a retreat from national goals or standards. It complements, rather than replaces, EPA's existing media-specific and statutory programs.
- Not a separate new program, a special limited initiative, or a pilot project. CBEP represents a whole new way of approaching EPA's mission that requires a change in how the Agency does business. It is not limited to one program, but requires the support of all the Agency's senior managers and the involvement of EPA staff on the issues that arise in each particular CBEP effort.
- Not solely doing a better job of community outreach or public relations in traditional EPA single-media programs. In addition, CBEP is not about stakeholder participation for its own sake or an abandonment of the use of the best available science (e.g., human health and ecological risk assessments) in environmental decision-making.
- Not focused on one environmental medium, problem, or component of the community. In the long run, CBEP is not focused solely on public health or pollution affecting a single environmental medium, but should involve all components of a comprehensive ecosystem. It is also not about EPA undertaking unilateral or uncoordinated action within a place, but requires taking a collaborative approach to addressing a community's concerns.
- Not intended to disrupt existing state-local government relationships. CBEP is not about EPA going around states to work with local governments. EPA must work in partnership with states, tribes, local governments, and citizens in targeting areas for action, setting priorities, and selecting EPA's role.

The CBEP Principles as a Guide for EPA's Involvement in Community-Based Projects

All CBEP projects, with or without EPA's involvement, will not exhibit all of the fundamental principles as described in this document. To some extent, the principles are intended to be a guide or a goal for many CBEP projects to aspire to and develop into over time. For example, many place-based efforts the Agency supports may begin with only one program involved (e.g., Superfund) or focus on a community's exposure to a single pollutant (e.g., lead in the soil of an inner city neighborhood). Eventually, however, as more stakeholders are involved and more scientific data is brought to bear on the source and nature of an environmental problem within a community, a project will often add more of the key principles of CBEP.

Sometimes Regional Offices may target and support community-based projects that initially address only a single concern, problem, or media. As a condition for the Agency's ongoing involvement/support, however, EPA and other stakeholders would be committed to making progress toward taking a multimedia approach to developing solutions. Figure 1, below, depicts the conceptual process by which a CBEP effort may progress from a single media, single issue focus toward more multimedia, ecosystem-based, holistic approaches.



C. Why is Community-Based Environmental Protection Important?

In the quarter-century since EPA was chartered as a federal agency, the United States has achieved remarkable improvements in environmental quality as a result of federal, state, tribal, and

local actions to reduce the level of pollutants in the nation's air, water, and land. While these pollutants continue to be a threat to public health and the environment, progress made in controlling them has revealed additional environmental challenges that past regulatory approaches are not effective in addressing. Today's most pressing existing and potential causes of pollution and ecological degradation are different from earlier decades - - as is the social, political, and economic context in which they are occurring.

"...EPA has been "program-driven" rather than "place-driven."... Nation-wide compliance with all federal environmental laws would not necessarily assure the reversal of disturbing ecological trends. EPA must collaborate with other federal, tribal, state and local agencies, as well as private partners, to reverse those trends and achieve the ultimate goal of healthy, sustainable ecosystems."

 Office of the Administrator, USEPA in "The New Generation of Environmental Protection: EPA's Five-Year Strategic Plan" (1994)

Today's environmental protection work is focused on problems such as: nonpoint source water pollution; region-wide air

pollution; redevelopment or ecological restoration of hazardous waste sites; urban sprawl patterns of development; habitat loss; the decline of biological diversity; global climate change; risk-based protection of human health; and the deposition or recycling of pollutants between air, land, and

"[C]ommunity-based environmental protection offers EPA an opportunity to address those problems over which it has little effective authority, if the agency listens well and provides useful help to community-based processes, and if the participants in those processes are willing to take national goals seriously, the result can be better local decisions."

-- National Academy of Public Administration in "Resolving the Paradox of Environmental Protection: An Agenda for Congress, EPA, & the States" (1997)

water. These problems have not been, and cannot be, solved only through traditional, media-specific, command and control approaches.

Governmental agencies and the public have increasingly recognized in recent years that all resources in a particular place (air, water, land, and living resources) are interconnected parts of a system, and they need to be addressed holistically at the local level. The White House, the EPA Administrator and other governmental and advisory organizations have expressed support for this type of an approach in numerous reports and documents.³ In

³EPA Science Advisory Board's pivotal report <u>Reducing Risk: Setting Priorities and Strategies for</u>
<u>Environmental Protection</u> (1990); the Vice President's <u>National Performance Review</u> (which recommended that

addition, the American public has become more environmentally aware and has become a more active participant in local environmental decision-making. With this awareness comes the recognition, among the public and government agencies alike, that not all parts of the country have the same problems or need the same kind of solutions. EPA's past experiences with place-based

programs, as demonstrated through certain Congressionally mandated place-based programs (i.e., National Estuary Program, Great Lakes, Chesapeake Bay, and Clean Lakes programs) and EPA initiatives and approaches (i.e., Regional Geographic Initiative, watershed approach), support the conclusion that solutions to environmental problems often are most effective when they are tailor-made to a specific place with the involvement of members of the community to develop the goals and monitor progress toward improving the quality of their lives and environment.

"Broad-based action is needed because government alone cannot accomplish long-term solutions to community problems.... Lasting solutions are best identified when people from throughout a community...are brought together in a spirit of cooperation to identify solutions to community problems."

 President's Council on Sustainable Development in "Sustainable America: A New Consensus for Prosperity, Opportunity, and a Healthy Environment" (1996)

CBEP has developed at a time when EPA has been adapting and expanding its approaches to environmental protection to meet present and future environmental challenges. Figure 2, below, shows some of the directions in which the Agency is moving.

federal agencies adopt "a pro-active approach to ensuring a sustainable economy and a sustainable environment through ecosystem management"); EPA's five-year strategic plan, The New Generation of Environmental Protection (1994); the National Academy of Public Administration's (NAPA) report, Setting Priorities, Getting Results: A New Direction for EPA (1995); the White House Interagency Ecosystem Management Task Force report, The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies (1996); the President's Council on Sustainable Development's report, Sustainable America: New Consensus for Prosperity, Opportunity, and a Healthy Environment (1996); the recent NAPA report, Resolving the Paradox of Environmental Protection: An Agenda for EPA, Congress, and the States (1997), and the Enterprise for the Environment (E4E) report, The Environmental Protection System in Transition (1998).

Figure 2: New Directions for EPA

THE PAST	NEW DIRECTIONS
Single Environmental Media Focus	Multimedia Focus
Regulatory Emphasis	Regulatory and Non-regulatory
Facility Focus Place-based and Sector-based	
Focus on Major Pollution Sources Focus on Smaller Sources, Nonpoint Sources	
Emphasis on Human Health Both Human and Ecological Health	
Federal Control	Partnerships with State/Tribal/Local
Success Defined by Activities	Success Defined by Results
Environment in Isolation Environment + Economy + Society	
Focus on Immediate Environmental Problems Prevention and Long-term Sustainability	

While many of these new directions help to define Community-Based Environmental Protection, such as the emphasis on multimedia issues, a place-based focus, and partnerships, it is important to recognize that other efforts at the Agency to develop innovative approaches to environmental protection, reduce costs, and achieve greater results, are related to and complement CBEP, as well as one another.

For example, CBEP has its roots in the ideas behind ecosystem management, EPA's geographic initiatives, the Office of Water's "watershed approach", sustainable development, comparative risk assessment, and the Vice President's reinventing government initiative. These pioneering theories and practices, over the past 10-15 years, have explored alternative approaches to environmental protection, examining the role of stakeholder involvement, the relationships among different environmental media in ecosystems, and the relationships between the economy and environment.

Specifically at EPA, geographic programs such as the National Estuary Program, the Chesapeake Bay Program, and the Great Lakes Program, have demonstrated on large scales the advantages of a CBEP approach. The Office of Water also has been at the forefront of ecosystem-based protection with its watershed approach, which, like CBEP, emphasizes collaborative partnerships, a geographic focus, and holistic approaches. Finally, reinvention initiatives have emphasized making government more effective and more efficient, and improving customer service. These efforts form the foundation upon which CBEP was built at EPA.

These complementary and related efforts, as well as a host of others (e.g., Brownfields, Environmental Justice, National Environmental Performance Partnership System, Sustainable Development Challenge Grants, and the Regional Geographic Initiative), should not be viewed as separate or competing initiatives and approaches, but rather as a set of tools that will help the

Agency improve its ability to protect and restore human and ecological health. Community-based environmental protection is one way that these various initiatives can be coordinated and brought to bear, as needed, in places.

III. What are EPA's Community-Based Environmental Protection Goals?

Because CBEP is an approach - or a way of doing business - and not a separate program, the specific goals of EPA's authorizing statutes and base programs (i.e., Air, Pesticides and Toxics, Solid and Hazardous Waste, and Water) are also EPA's CBEP goals. By adopting the CBEP approach, the Agency is supporting the implementation of EPA's Strategic Plan as submitted to Congress in September 1997 under requirements of the Governmental Performance and Results Act (GPRA). CBEP actively supports the Agency's mission, program-specific goals, and the principles as stated in the Strategic Plan.⁴ [See *Appendix 1* for a list of EPA program goals and guiding principles as described in the Strategic Plan]. The CBEP approach also is consistent with a number of the guiding principles characterized in the Strategic Plan, especially "emphasizing comprehensive regional and community-based solutions" as described in chapter 3 of the Plan. Other principles endorsed by the CBEP approach include reducing health and environmental risks, maximizing public participation, applying sound science, and strengthening partnerships.

Achieving all of EPA's statutory mandates and base program goals, however, would still not produce a sustainable environment. CBEP allows the Agency to more effectively protect the environment at the community level. By taking a holistic and collaborative approach that considers the relationship of a community's environmental concerns to its economic and social conditions, EPA can help communities develop solutions that are both comprehensive and sustainable.

EPA's CBEP goals are:

- To achieve environmental results consistent with EPA's mission and base program goals as stated in EPA's authorizing statutes and Strategic Plan.
- To support communities' efforts to use, protect, and restore natural resources land, air, water, and biodiversity in ways that help ensure long-term ecological, economic, social, and human health benefits for ourselves and future generations.

⁴ "The mission of the U. S. Environmental Protection Agency is to protect human health and to safeguard the natural environment - air, water, and land - upon which life depends." *EPA Strategic Plan*, September 1997.

- To help communities address environmental concerns and issues not amenable to traditional federal regulatory approaches, such as urban sprawl, nonpoint source controls, and loss of biological diversity.
- To promote integration of EPA programs and activities in ways that complement and improve existing regulatory frameworks, and to deliver our programs and services in ways that enhance sound community-based decision-making.

IV. How Does EPA Plan to Implement the Community-Based Environmental Protection Approach?

EPA's specific role in CBEP projects will vary from place to place. In some places EPA may work directly with communities as a leader or an active partner in designing and implementing effective environmental solutions. In most places, however, EPA's role will be far more limited. We may be indirectly involved by supporting and assisting the efforts of others in building a sustainable infrastructure of community partnerships for environmental decision-making. Regardless of its role, EPA can be a valuable resource by providing data, information, and tools to states, communities, and the public. In addition to supporting work in places, EPA will reorient its internal programs and procedures toward the CBEP approach.

EPA, through its Headquarters and Regional Office activities and programs, will try to realize its goals for CBEP by employing three principal strategies:

Reorienting EPA Programs for CBEP. EPA will implement policy and rule revisions, establish education and training programs, identify and leverage resources, and use other appropriate steps to integrate the principles of CBEP into all Agency programs. EPA will build upon existing programs and initiatives within the Agency that may already include a number of key principles of CBEP, such as the Brownfields initiative, the watershed approach, and the environmental justice program.

<u>Building External Capacity</u>. EPA will improve community and public access to environmental, economic, and societal data, information, tools, and training for CBEP. In addition, EPA will use its grant resources (e.g., Regional Geographic Initiative funds) as catalysts for state, tribal, and local CBEP efforts.

Participate in places that need and/or require EPA leadership or direct involvement. EPA Regional Offices will need to develop priority setting processes and methods to identify and select new geographic areas that require significant Agency resources. Any process for targeting places will consist of three key components:

- ✓ <u>Assessing the Need for EPA's role</u> Does the area distinguish itself as needing or requiring EPA Regionallevel attention and resource focusing?
- ✓ Level of Ecological/Human Health Risk Are the risks to humans and natural resources significant?
- ✓ Judging the Likelihood of Success
 Will the Agency's involvement produce tangible short-term and long-term results?

The EPA's CBEP Action Plan for implementing the above strategies during the upcoming three years is presented in Part II, below.

Figure 4 provides some examples of proposed EPA actions for implementing the three strategies as described in the CBEP Plan.

Possible Criteria for Selecting Places for EPA's Direct Involvement

Assessing the Need for EPA's Role

- ✓ Resources of national significance
- ✓ Requires multi-media effort
- ✓ Transboundary concerns
- ✓ Community needs currently unfulfilled

Determining Ecological/Human Health Risk

- ✓Ecosystems at particular risk or of importance
- ✓ Exceptional risk to human health
- ✓ Disproportional impact on minorities or low income groups

Judging the Likelihood of Success

- **✓**Community capacity and readiness
- ✓ Availability of Agency resources

V. How Will EPA Measure and Track Community-Based Environmental Protection Results?

The Agency must be able to demonstrate the progress it makes toward realizing its CBEP goals. EPA recognizes the difficulty in developing measures that are sufficiently flexible to reflect local and regional variation in objectives, but still reflect progress toward EPA's national CBEP goals. The Agency also recognizes that most CBEP activities require years before they can demonstrate actual environmental results. Performance measures must be capable of measuring *progress toward* EPA's CBEP goals as well as *achievement* of those goals.

The Agency must strive to answer three questions about CBEP performance:

- How much progress is the Agency making in implementing its 3-part CBEP strategy?
- **2** What environmental results does CBEP help the Agency achieve?
- **3** How does CBEP promote long-term environmental sustainability?

^{*} Places must meet at least one criteria from each category to warrant EPA's direct involvement.

EPA will use three types of measures to demonstrate answers to these questions: *activity measures*, *environmental results measures*, and *measures related to sustainability*.

Activity Measures. These measures enable EPA to gauge progress in the acceptance and use of CBEP approaches within EPA and by others outside EPA. They also will provide a profile of the various ways CBEP activities are implemented.

Environmental Results. These measures gauge actual changes in environmental conditions.

Measures Related to

Sustainability. These measures, when added to the environmental measures, seek to describe changes that determine whether future generations will enjoy a stable, healthy environment. Although EPA and our partners in CBEP activities will not be held accountable for these measures, we will track them as indicators of progress toward a more sustainable future.

| Measures Related to | Indicators | I

Types and Categories of CBEP Measures

CBEP Activity Measures

✓EPA's efforts to reorient EPA programs for CBEP

✓EPA's efforts to build the capacity of other groups to engage in CBEP activities through information and other tools

✓EPA's efforts to use a CBEP approach working in places

Measures of Environmental Results

✓Environmental and human health measures used by EPA's program offices

✓Other ecosystem measures

Measures Related to Sustainability

- ✓ Economic measures of sustainability
- ✓ Social and cultural measures of sustainability

See Figure 3, below, to see how these types of measures track to the CBEP goals.

Figure 3

CBEP Goal	Type of Measure	Category
To promote integration of EPA programs and activities in ways		Reorienting
that complement and improve existing regulatory frameworks, and to deliver our programs and services in ways that enhance sound	Activity	Capacity Building
community-based decision-making.		Working in Places
To achieve environmental results consistent with EPA's mission and base program goals as stated in EPA's authorizing statutes and Strategic Plan.		Program Office
To help communities address environmental concerns/issues not amenable to traditional federal regulatory approaches, such as urban sprawl, nonpoint source controls, and loss of biological diversity.	Environmental Results	Ecosystem
To support communities' efforts to use, protect, and restore natural resources - land, air, water, and biodiversity - in ways that help ensure		Economic
long-term ecological, economic, social, and human health benefits for ourselves and future generations.	Sustainability	Social/Cultural

Both Regional and Program Offices will track office-wide activity measures in each of the categories. In addition, in CBEP priority places, Regional Offices will track each of the categories of environmental results and sustainability measures; however, specific measures and indicators should be tailored to the specific characteristics, goals, issues and objectives in each priority place. *The actual measures or indicators are not prescribed.*

EPA's CBEP Action Plan in Part II, below, contains a more detailed description of each category of performance measure, key actions the Agency will implement in developing and testing CBEP measures and tracking systems, and a list of examples of specific measures is included in *Appendix 2*.

Figure 4: Examples of Proposed EPA Actions for CBEP Implementation

Proposed Strategies	Proposed Actions
Reorient EPA programs for CBEP	Establish an EPA CBEP Leadership Committee to expedite and ensure implementation Dedicate funds from each of EPA's national programs for CBEP activities Identify opportunities for integrating CBEP approach into EPA's media and supporting programs Work with states/tribes to develop joint CBEP goals, strategies, and measures for agreements w/ EPA Identify options for increasing EPA funding flexibility and travel funds to support CBEP projects Assess Agency's CBEP training needs, and inventory, develop, and deliver CBEP training activities
Build capacity of EPA's partners and community stakeholders	Establish a work group to improve the collection, sharing, and use of Agency information Review EPA's research, assessment, and monitoring activities to determine their application to CBEP and usefulness to communities Work with other Federal agencies/NGOs to develop and implement joint strategy for capacity building Create an on-line, searchable database containing information on CBEP funding sources
Select and work in priority places	Develop targeting and selection methods within each EPA Regional Office for determining in which places EPA will participate directly as a stakeholder Develop specific plans for each place in which EPA is directly involved as a stakeholder to establish the Regional Office's objectives, role, and milestones
Measuring and Tracking CBEP Performance	Develop and pilot measures and indicators, processes for tracking, and opportunities for consolidated reporting for EPA's CBEP projects and activities Develop and implement strategy for tracking and reporting CBEP under GPRA's accountability system

Source: Community-Based Environmental Protection Action Plan (see Part II).

PART II: EPA's Community-Based Environmental Protection Action Plan

I. Reorienting EPA Programs for Community-Based Environmental Protection

In taking a CBEP approach, EPA is hoping to improve the effectiveness of our nation-wide environmental programs and regulations. The following section identifies key strategies and actions for institutionalizing CBEP within the Agency's Headquarters and Regional Offices over the next three years.

• The Agency's senior management will support and participate in the development of CBEP policies, plans, and projects.

All of EPA's senior managers need to demonstrate a clear, strong Agency commitment to community-based environmental protection. EPA Headquarters' senior managers will demonstrate leadership at the national level and show dedication to supporting Regional CBEP efforts.

#	Action Item	Lead(s)	Date
1	EPA will establish a CBEP Leadership Committee (CLC) responsible for resolving key budget and policy issues, developing recommendations for expediting cultural change within the Agency, and coordinating with other agencies and entities. The Committee will consist of no fewer than 4 senior Agency managers chosen from the ranks of the Assistant Administrators, Deputy Assistant Administrators, Regional Administrators, and Deputy Regional Administrators. The CBEP Leadership Committee will meet on an <u>as needed</u> basis and will report its recommendations to the Deputy Administrator and other senior managers at national Agency meetings.	OW, OPPE, OR, Region 4, Region 5, and additional HQ and Regional Office representation	

• National Program Managers (NPMs) and Regional Offices will advance EPA's Strategic Plan *and* CBEP goals by sharpening the Agency's focus and strengthening its continuing efforts to deliver community-based environmental protection through coordinated funding, technical assistance and reporting.

National Program Managers (NPMs) and Regional Offices will agree to work together to ensure that all EPA programs are engaged in a CBEP approach to achieve both program goals and place-specific goals. The Agency will foster institutional change by engaging NPMs and Regional Offices in a collaborative funding and reporting process to address NPM

goals through Regional Office community-based environmental protection work in places. A more focused approach through Headquarters and Regional collaboration will help engage NPMs more directly in the CBEP approach and ensure that Regional Office projects and activities clearly relate to Agency goals.

#	Action Item	Lead(s)	Date
2	EPA will implement a process for Regional and Program Offices to coordinate and jointly fund projects and activities which employ a community-based approach. Both NPMs and Regional Offices are to work collaboratively to develop the CBEP (NPM-RGI) Fund, agree on guidance on project approvals, implement the project selection and funding process, agree on uniform Regional measures for accountability and success, and assess the lessons learned from the process. In June 1998, the Workgroup will report to the CLC and the Deputy Administrator on lessons learned and make recommendations for improvements in the process.	A CBEP (NPM-RGI) Fund Workgroup, with designated Regional Office and NPM representatives (OAR, OECA, OPPTS, OSWER, and OW) will be formed to create, implement and evaluate the funding and reporting process. OPPE/OSEC and OA/ROS will co-chair and facilitate the workgroup.	FY 98

• EPA will integrate CBEP principles, goals, and measures of progress into all areas of the Agency's business.

CBEP principles (e.g., multi-media, multi-disciplinary, and collaborative approach), goals, and indicators (i.e., improving sustainability and the quality of life) will become a basic part of each program's planning, budgeting, and implementation systems. The Agency will take advantage of current oversight mechanisms and other relationships with state environmental and natural resources agencies as effective tools for integrating CBEP within their programs.

#	Action Item	Lead(s)	Date
3	The Agency will form a <u>Headquarters-Regional Offices CBEP Workgroup</u> to identify obstacles and opportunities for direct participation of National and Regional Programs in the planning, budgeting, and reporting on CBEP projects. The HQ-RO CBEP Workgroup will provide recommendations to the CBEP Leadership Committee on suggested changes to the Agency's planning, budgeting, and reporting systems. Based on direction provided by the Leadership Committee, the Workgroup will guide the development of Agency-wide and program-specific policies, tools, and case studies on ways to integrate the CBEP approach into EPA's media and supporting programs.	CLC, CBEP Coordinators, CBEP Division Directors and OPPE	

4	EPA will work with States and across Agency programs in developing joint CBEP goals, principles, strategies, and measures of performance that will be incorporated into EPA-State/Tribal Performance Partnership Agreements, grants and/or any associated guidance and regulations. EPA will work with the Environmental Council of the States (ECOS) on ways to build support for and implement community-based environmental protection through the National Environmental Performance Partnership System (NEPPS) and other regular interactions between the States and EPA	Region 5, ORO/SLRS, OCLA, OARM and OPPE	
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• The Agency will evaluate its current programs and policies to determine ways to improve the effectiveness of EPA's delivery of its services within places and its external capacity building efforts for CBEP.

EPA's work in places will require a greater emphasis on effective coordination and enhanced flexibility in the way the Agency allocates its resources. For example, EPA Regional Offices will need an appropriate level of flexibility to allow them to target the Agency's grant and travel resources toward placed-based projects. In a number of cases, the Agency's ability to use its employees to do hands-on work in places is an important tool and resource for the Agency. It helps build the Agency's credibility in the community as well as building internal capacity and real experience.

#	Action Item	Lead(s)	Date
5	The HQ-RO CBEP Workgroup (see Action Item 3) will identify options and make recommendations to the CLC for improving coordination and increasing funding flexibility within EPA grant programs for CBEP projects. The Workgroup also will assess options for giving EPA Regional Offices more multimedia grant authorities or creating such authorities for funding multimedia projects.	OARM, CBEP Coordinators, CBEP Division Directors and OPPE	
6	The Agency will identify options and make recommendations to the CLC for increasing the amount and/or improving the efficiency of Agency travel funds for EPA's work in places. The Agency also will identify innovative approaches for locating Agency employees with the relevant expertise within places, wherever appropriate. (i.e., field offices, Intergovernmental Personnel Act assignments).	OCFO, OPPE, Regions 2, 7, and 8	

• The Agency will build staff skills and expertise to implement CBEP through training, hiring new staff, and/or obtaining greater access to outside experts.

Although the Agency already has a great deal of experience and expertise to build on, EPA needs to strengthen and broaden its CBEP-related skills and tools - especially in areas of stakeholder involvement and holistic planning and assessment - to be as effective as

it can be. CBEP will require the Agency to make a greater investment in human resources in order to assure that it has the necessary skills and expertise to assist communities effectively. The Agency will improve staff skills and expertise through: (1) more <u>training</u> in areas of social science, such as group facilitation and building consensus, cultural sensitivity, systems thinking, economics, goal setting, and communicating ecological issues; and, (2) <u>hiring</u> new staff, developing new career tracks, and obtaining greater <u>access to outside experts</u> like economists, sociologists, cultural anthropologists, GIS specialists, risk assessors, and indicator development specialists. EPA can benefit from the participation of people with on the ground experience working in communities such as non-profit organizations and universities. In addition to developing the necessary skills for implementing the CBEP approach, EPA will continue to provide all its employees with training and education on the basic principles of CBEP.

#	Action Item	Lead(s)	Date
7	EPA will establish a team consisting of EPA HQ and Regional managers and staff that will assess the Agency's CBEP training needs, inventory current training activities, and communicate effective CBEP training and education efforts throughout the Agency. NPM's and Regional Offices will work through this team to develop a series of CBEP training modules for educating EPA employees on the goals, principles, and expected outcomes of CBEP. General CBEP training may include a satellite town meeting for EPA management and/or half-day trainings on CBEP for all EPA employees.	OARM – EPA Learning Institute, OPPE, Regions 3, 5, and 6	

• The Agency will provide the scientific foundation to support CBEP activities by making greater investments to develop, enhance, and transfer scientific information and technology.

In the CBEP approach, public agencies, private organizations, and citizens monitor and evaluate environmental, social, and economic conditions holistically on various geographical scales. These groups need data and information, including criteria or benchmarks, that are specific to their area of interest. In addition, their local decisions are impacted by environmental factors external to the locality. Communities need guidance materials, training, and other technical tools to understand and interpret this information and make environmental decisions affecting their locality. New tools and models that can integrate diverse amounts of data and information (e.g., population, income levels, landscape cover, land use, biological diversity, multi-chemical exposure, comparative risk) and simulate the results of community planning scenarios are required. In addition, tools and information are needed to identify, target, and plan work in priority places. Communities also need measures and indicators of environmental, social, and economic conditions to evaluate progress toward meeting their human health and ecological objectives.

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#	Action Item	Lead(s)	Date
8	The Agency will: (1) identify potential Agency CBEP science (i.e., research and technology) activities; (2) characterize the existing Agency CBEP science activities; (3) determine what additional science activities are needed; (4) integrate the science activities into the Agency's research planning process; and (5) design, develop, disseminate, and assist in the application of Agency CBEP science support products (e.g., tools, models, guidance, technical support, training).	EPA's Office of Research and Development (ORD) and OPPE will co-lead the overall effort to address the Action Item objectives. OPPE will be the lead for characterizing the existing CBEP science activities and products across the Agency's Programs and Regions. ORD will be the lead for characterizing current ORD scientific support. ORD, working with the Program Offices and Regions, will lead the identification of potential Agency CBEP science activities. ORD will facilitate the process of integrating the priority CBEP needs into Agency's research planning process and the generation and dissemination of ORD CBEP support products.	

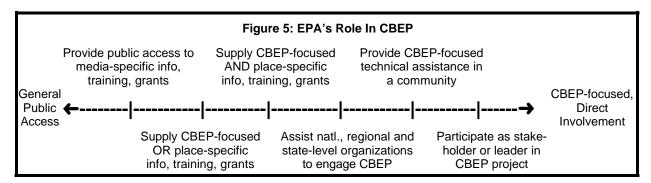
II. Building External Capacity for Community-Based Environmental Protection

EPA cannot be directly involved in every community in the country, nor would it want to be. It can, however, help to build the capacity of others to engage in CBEP activities. The purpose of capacity building efforts is to help build community infrastructure to address environmental issues and pursue sustainability with little or no direct EPA involvement. Rather than concentrating all of its resources in one place, the agency reaches thousands of communities, sometimes as a catalyst, sometimes to help communities resolve technical or information problems. This strategy allows EPA to maximize the potential environmental benefits of the CBEP approach. It is important to note that capacity building is a two-way street, and the Agency has much to learn from its partners. This strategy focuses, however, on what EPA can do to help build capacity in others.

EPA tries to build capacity in those organizations, groups and individuals who can and will engage the CBEP approach in places. Because CBEP activities often are bottom-up endeavors, these external parties include citizens, community groups, nonprofits, associations, and local, state and tribal governments. EPA uses three broad tools to build external capacity: 1) data and information, 2) training and technical assistance, and 3) grants.

What is External Capacity Building?

It sometimes is difficult to define where "capacity building" ends, and "direct involvement" begins, because, in a sense, all EPA work in places builds capacity. This relationship can be understood by considering EPA's role in CBEP on a continuum. (See Figure 5, below.)



On the far left of the continuum, EPA supports CBEP indirectly by improving public access to various existing environmental data, information, training and grants. These tools usually have a single-media, single-discipline focus and are not targeted for particular geographic areas. They are the raw materials for communities to shape into useful tools. EPA's role becomes more directly supportive of CBEP as the continuum moves right by focusing more on the CBEP principles and/or by becoming more oriented toward specific places. At the far right, EPA is an active stakeholder in a community, and may be taking the lead in CBEP efforts.

Strategies for External Capacity Building

Capacity building efforts across the full range of the continuum are necessary to maximize the opportunities for CBEP. No one role for EPA is better than the others. Some roles are less labor intensive or can reach a larger audience (e.g., providing access to existing data), while others are more relevant to a particular audience (e.g., technical assistance). All are effective and important and EPA should strive to play them all. The following strategy suggests ways EPA can improve and maximize capacity building when it assumes less direct roles than being a full stakeholder in a community.

• The Agency will assemble and deliver data and information in ways that inform the community-based decision-making process and motivate the Agency's constituencies to protect the environment.

EPA has been working to improve public access to useful environmental information for years. The "Expansion of American's Right to Know About their Environment" is in fact a separate EPA goal in the Agency's Strategic Plan. With sources like the Toxic Release Inventory and *Envirofacts* on the EPA web site (http://www.epa.gov), which provides access to a range of existing EPA databases, EPA works to arm the public with information about their local environment. EPA needs to continue to improve the accessibility of existing environmental information to a broader range of stakeholders.

#	Action Item	Lead(s)	Date
9	EPA's Information Resources Management (IRM) Executive Steering Committee and the Center for Environmental Information and Statistics (CEIS) will jointly establish a CBEP information workgroup to provide advice on funding needs for CBEP, and develop strategies to improve information collection, sharing and use. The workgroup will give special attention to: (1) providing usable and accessible EPA programs' data and information to the public and communities; and, (2) forging stronger information-sharing partnerships with external organizations (i.e., federal agencies, states, tribes, other governmental entities, non-governmental organizations, universities, and other information providers).	OIRM, OPPE/CEIS, and OW	

• Capacity building tools will reflect and promote the CBEP principles.

EPA's capacity building tools need to reflect and promote the CBEP principles in order to maximize their potential benefit to communities. Tools should be relevant at the community level and, when possible, tailored for specific places or for specific types of problems; they should be understandable and available to a range of stakeholders; they should include information on cross-media issues; and, they should include economic and social, as well as environmental information.

For example, EPA Region 3 has put together a *Green Communities Assistance Kit* that provides a step-by-step guide for identifying and resolving community needs, interests and problems for a range of communities - urban, suburban and rural. Other examples of capacity building tools include OPPE's *Community-Based Environmental Protection: A Resource Book for Protecting Ecosystems and Communities*, the *Community Cultural Profiling Guide*, and EPA's on the ground technical assistance to conduct *comparative risk assessments* in communities.

• EPA will help to build, in communities and at the national level, an infrastructure of partnerships and coalitions.

An infrastructure for environmental decision-making (including government agencies, nonprofit and grassroots organizations, and citizens) is the foundation upon which stakeholders with competing and complimentary interests can work together to identify, assess and address environmental issues and pursue sustainability. EPA should help to build this infrastructure by bringing stakeholder groups together, and also by encouraging those who already are using a CBEP approach to pass along their knowledge and skills to people in other communities. By helping to build this infrastructure, EPA promotes informed community environmental decision-making for years to come in communities where it is directly involved but may not be in the future, as well as in communities where it may never be involved.

#	Action Item	Lead(s)	Date
10	EPA will work with other Federal agencies and NGOs to develop and implement joint strategies for CBEP capacity building. These groups often have resources, membership or constituencies in communities that EPA may never reach, but to whom EPA has something to offer, and vice versa.	OPPE/OSEC and OFA	

• EPA will make efforts to coordinate the various place-based grant programs and provide communities with information on sources of funding for CBEP efforts.

Grant-making can be an excellent CBEP capacity building tool; however, because EPA has multiple grant programs with multiple application procedures, it often is difficult for communities to determine what resources are available from the Agency and for what purposes. In addition, place-based grant programs and CBEP activities with related purposes do not always coordinate their activities to maximize the potential benefits. To maximize the impact of grants, EPA will make efforts to coordinate the various place-based grant programs with related CBEP activities (see Action Item 5), and improve access to place-based grant information.

#	Action Item	Lead(s)	Date
11	EPA will create an on-line, fully searchable database containing information on sources of funding available for watershed- and community-based environmental protection efforts. This database will improve public access to grant information, and will provide valuable information for EPA's HQ-RO Workgroup working on increasing CBEP funding flexibility (see Action Item 5).	OPPE/OSEC and OW	

III. Targeting Priority Places and Working Directly With Stakeholders⁵

• EPA Regional Offices will establish rational methods for identifying and selecting priority places for the Agency's direct involvement.

In addition to reorienting its programs and building state, tribal, and local capacity, EPA, primarily through its Regional Offices, will implement the community-based approach by becoming directly involved with stakeholders in designated priority places. There is no single process or right way for all EPA Regional Offices to identify, select, and work in priority places. However, EPA recognizes that certain key elements are necessary for any process that determines which geographic areas are a priority for the Agency's direct involvement. The following section offers some minimal guidelines for Regional Offices in developing a process for targeting and working in priority places.

EPA will continue working in those places that already have been selected as priorities for direct EPA involvement. To identify and select new geographic areas that will require significant Agency resources, however, Regional Offices will need to develop priority setting processes and methods based on specific guidelines provided in this section of the CBEP Framework. Any process for targeting priority places will include collecting and assessing information under three key categories:

- (1) the need for an EPA role;
- (2) the level of ecological/human health risk; and
- (3) the likelihood of success of EPA efforts.

The Framework includes <u>examples</u> of criteria within each category that could be used by Regions. Places should meet at least one criteria within each category to be designated a priority.

⁵ For the purpose of the Framework, "working directly with stakeholders" implies hands-on involvement by the EPA in a place, and may mean playing one or more of the following roles during the planning and implementing of a CBEP effort: (1) acting as a leader among stakeholders; and (2) serving as an active but equal stakeholder within a place. In either role, EPA may provide direct and substantial assistance (i.e., placement of Agency employees within a community, providing funding, technical assistance, and/or data and information) to other stakeholders within a place.

(1) Assessing the Need for an EPA Role

For proposed new geographic areas that are candidates for direct EPA involvement, Regional Offices will need to assess whether the area will be significantly enhanced by direct EPA assistance and the area distinguishes itself as needing or requiring Regional-level attention and resource focusing. Critical factors for determining the need for an EPA role may include:

- Area includes **resources of national or international significance**, as designated by the U.S. Congress, the United Nations, an appropriate government agency, or organization. Examples include the Great Lakes, the Everglades, the Northwest Forests, and the Grand Canyon.
- Area demonstrates **transboundary** (**multi-state or international**) **concerns**, such as the Gulf of Mexico, the Platte River, Puget Sound, and the Rio Grande.
- Community **needs** and/or environmental **concerns are currently unfulfilled** by other governmental agencies or stakeholders.
- **Requires a concerted multimedia, multi-programmatic effort**, or the area requires extraordinary effort for one or a few EPA media programs such that routine programmatic functions cannot adequately meet the communities' needs or environmental concerns.

A candidate area must show that EPA could contribute significantly in at least one of the following ways: technical assistance; funding; statutory/regulatory authority; catalyst, facilitator, organizer, communicator, or mediator.

(2) Level of Ecological and Human Health Risk

To a certain extent, any process for determining direct EPA involvement needs to consider the significance of risks to humans and natural resources. For beginning work in any new areas, EPA Regional Offices will ensure that they are places with:

- Ecosystems that are threatened, degraded, seriously impaired or important to the maintenance of biodiversity and major ecological corridors (e.g., aquatic ecosystems supporting salmon populations in the Pacific Northwest, flyways supporting migratory bird populations in the Great Plains);
- Exceptional risk to human health -- for example, areas with high PCB contamination in sediments, hazardous air pollutants, or fish consumption advisories; *and/or*
- Environmental effects which are disproportionately felt by minority populations and/or the economically disadvantaged and subsistence groups (e.g., dependent upon fish for food).
- (3) <u>Judging the Likelihood of Success of EPA Efforts.</u>

Before becoming directly involved in a place, EPA will need to consider a number of indicators to determine the likelihood that the Agency's involvement will produce tangible short-term and long-term results. Possible indicators of success my include:

- Scale and **clarity in the boundaries** of the geographic area;
- **Community capacity and readiness** (e.g., existence of an established community infrastructure for environmental decision making, quality of environmental partnerships and leadership);
- Public interest and partnership support for technical, financial, and information assistance;
- Availability of Agency resources.

EPA Regional Offices <u>are not</u> required to adopt any of the example criteria within each category nor is it suggested that any one category is more important than another. Regions are only encouraged to develop a targeting process that includes the three categories. Other decision methods may be used to further winnow down the list of projects or geographic areas (e.g., weighting schemes; the desired balance of rural and urban ecosystem types and problems; the number of states represented).

In order to identify priority areas consistent with the above categories, targeting methods will be developed based on scientific data and professional judgement. The final product of this identification and targeting effort might be a map of the region, preferably in a GIS format, depicting geographic areas that require EPA's direct involvement. The Regional Offices would dedicate Agency resources to CBEP projects within these priority environmental protection areas.

#	Action Item	Lead(s)	Date
12	Each EPA Regional Office will develop a process for identifying and selecting priority places for the Agency's direct involvement based on the three key targeting components described in the CBEP Framework. Regional Offices will have documentation of project selection methods and, if appropriate, a list or map of priority places.	All Regional Offices and OPPE	6/1999
13	EPA's Information Resources Management (IRM) Executive Steering Committee and the Center for Environmental Information and Statistics (CEIS) CBEP information workgroup (see Action Item #9) will provide Regional Offices with adequate resources, training, and expertise for using GIS for mapping and assessing CBEP problems.	OIRM, OPPE/CEIS, and OW	

• Each EPA Regional Office will develop place-specific plans or strategies that establish the Region's objectives, roles, and milestones.

Once EPA Regional Offices have selected their priority places for direct Agency involvement, each Region will develop place-specific plans or strategies that establish the Region's objectives, roles, and milestones. Place-specific plans will be developed in coordination with plans and priorities of EPA regional and national programs, states, federal agencies, and regional and local organizations. Wherever possible, EPA's place-specific plans will be linked to Agency program goals and objectives identified in the Strategic Plan.

EPA Regional Offices' plans for priority places may include the following elements:

• Background and Reason for Selection of Place as a Regional Priority

- a brief description of: (1) ongoing efforts within the priority place by EPA and other partners (e.g., EPA program funding and activities, risk assessments and studies); (2) reasons for selection of place as a priority (e.g., criteria met, selection methods used); and, (3) major sources, stressors, and issues related to human health and the environment (e.g, loss of habitat, nutrient enrichment, metals mining and ore processing)

• Performance Goals and Measures

- a description of: (1) short and long-term activity, human health and environmental, and sustainability goals (e.g., restore depressed stocks of shellfish and wildlife to sustainable levels); and, (2) short and long-term measures and indicators used to gauge progress towards achieving goals (e.g., trends in the populations sizes of species which are depressed in number). The environmental conditions being measured may not change significantly on an annual basis and may represent conditions that are only marginally affected by direct EPA actions. The goals and measures for priority places may be developed with the cooperation of partners and stakeholders

EPA Role and Nature of Involvement

- a description of EPA's role and involvement including: 1) alternative public and/or private action, if any, to EPA involvement and how EPA involvement will make a difference; (2) extent and type of services/activities to be provided by EPA; 3) appropriate level of responses to place-specific projects; 4) essential partnerships and minimum/optimum requirements for collaboration; 5) project assistance time periods and goals for successful project initiation, execution, and closure; and 6) supplementary sources of funding, services and information.

• Resource Allocations and Milestones

- a description of: (1) resource allocation identified for CBEP activities; (2) guidance and milestones for providing funds, technical assistance, information to communities and other service providers.

Monitoring and Evaluation of Results

- a description of process to be used for periodic assessment of progress in achieving EPA's outputs and outcomes. Regional Offices will redirect its funding and activities when necessary to continue the Agency's contribution to progress in a meaningful and substantive direction.

#	Action Item	Lead(s)	Date
14	EPA Regional Offices will have plans for all priority places that include, at a minimum, the elements described in the CBEP Framework.	All Regional Offices, OPPE	FY 99

• EPA will adopt long-range planning for multi-year investments when working in places.

The CBEP approach often will require EPA to have multi-year commitments with stakeholders within specific places. EPA Regional Offices should try, to the greatest extent possible, to dedicate and use their resources on a multi-year basis so they can respond to the needs of the community and build trust in the Agency's commitment among stakeholders.

• Wherever appropriate, EPA Regional Offices will locate Agency employees with the relevant expertise within places.

Place-based work will require individuals that are savvy about EPA programs (e.g. know how to make the inter-governmental and inter-personal connections), have the trust of EPA management (e.g. ability to represent the Agency and make decisions), and have existing contacts with the community (e.g. trust relationships are established). Individuals with training and experience in facilitation and consensus-building are especially useful to place-based projects.

• The Agency will promote a collaborative culture that supports the development of cross-office teams.

As a multi-media and multi-disciplinary approach, CBEP requires governmental agencies to make the most constructive use of teams using public and private individuals drawn across programs, professions, and governmental jurisdictions. Teams can be an effective tool in implementing the CBEP approach within the Agency by fostering: the integration of media program functions and expertise; leveraging relatively small amounts of resources across individual programs; bringing together people with diverse backgrounds and areas of expertise; and, most important, creating a work environment based on mutual respect and collaboration.

IV. CBEP Performance Measurement and Tracking

The Agency must be able to demonstrate the progress it makes toward realizing its CBEP goals. By measuring, tracking and reporting CBEP performance, EPA can justify to the public, to Congress and to its own management, resources devoted to CBEP. The Agency also can maximize the efficiency of those resources by using performance measurement information to support adaptive management. In order to pursue the approaches to environmental protection that work best, and to take steps toward removing barriers to CBEP, first the Agency must know what those approaches and barriers are. EPA can answer these questions by instituting a common method for measuring and tracking CBEP performance throughout the Agency.

• Regional and Program Offices will measure, track and report CBEP performance.

EPA performance measurement system will be sufficiently flexible to reflect local and regional variation in objectives and CBEP activities, while still demonstrating progress toward EPA's national CBEP goals. EPA will measure CBEP performance by answering three questions:

- How much progress is the Agency making in implementing its 3-part CBEP strategy?
- **②** What environmental results does CBEP help the Agency achieve?
- **3** How does CBEP promote long-term environmental sustainability?

The Agency will use three types of measures to answer these questions: activity measures, environmental results measures, and measures related to sustainability. These three types of measures are organized into the categories described below. (Appendix 2 more fully defines the categories and provides examples of measures for each. The examples are not required measures.) Regional and Program Offices both will track office-wide activity measures in each of the categories. In addition, in CBEP priority places, Regional Offices will track each of the categories of environmental results and sustainability measures; however, specific measures and indicators should be tailored to the specific characteristics, goals, issues and objectives in each priority place. The actual measures or indicators are not prescribed.

(1) CBEP Activity Measures: Activity measures will enable EPA to gauge the progress of the three-part CBEP implementation strategy. The Agency will quantify and qualify "activities" undertaken to reorient the Agency toward CBEP, to build capacity for CBEP in others, and to use a CBEP approach in priority places.

In the long-term, such "activity" or "output" measures may be down-played, but while CBEP is still in the implementation stage these measures answer the first order question of whether and how the Agency is in fact "doing" CBEP. These measures are particularly necessary because CBEP is a relatively new approach and it often takes years before environmental results are realized and/or can be measured. Therefore, the system must gauge *progress toward* EPA's CBEP goals as well as *achievement* of those goals. The Agency will use activity measures in the following three broad categories:

- **a. Reorienting EPA Programs for CBEP.** Measures under this category will gauge progress in the acceptance and use of CBEP approaches within EPA. The category will track changes in EPA systems, policies and rules to integrate CBEP goals and principles.
- **b. Building External Capacity.** Measures under this category will track EPA's efforts to make CBEP-oriented tools (i.e., data and information, training and technical assistance, and grants) available to community stakeholders, and will attempt to gauge the impacts of those tools on the capacity of tribes, states, local governments, and communities to engage in CBEP activities.
- **c.** Working in CBEP Priority Places. Measures under this category will characterize CBEP priority places, the nature of EPA's work in these places, and the types of issues being addresses. The measures will reveal the extent to which each CBEP principle is embraced, and in what types of situations.
- (2) Environmental Results in Places: Measures of environmental results gauge the actual changes in environmental conditions in CBEP priority places.

These measures tells us whether CBEP advances EPA's mission of protecting human health and safeguarding the natural environment. The Agency is committed to answering this question under the CBEP objectives in the Strategic Plan, which charge that we "quantify [CBEP's] tangible and *sustainable environmental results* in places where EPA is directly involved." Because CBEP approaches environmental protection holistically, the Agency must measure not only human health and the health of component parts of the environment (e.g., air, water, land), but also the health and stability of ecosystems. The Agency will use two broad categories of environmental results, to be tracked only in CBEP priority places:

- **a. EPA Program Office Environmental and Human Health Measures.** *Measures under this category would be drawn from those used by EPA's Program Offices, under GPRA or other reporting mechanisms, to gauge their success.* This category will help establish CBEP's ability to help meet the environmental goals of traditional EPA programs.
- **b.** Ecosystem Measures. *Measures under this category will gauge the overall stability of ecosystems in CBEP priority places.* The category seeks to capture environmental benefits that media-specific EPA programs usually do not address.
- (3) Measures Related to Sustainability: This type of measure will gauge whether CBEP is positively influencing behaviors and choices that directly impact long-term human and ecosystem health.

The GPRA Strategic Plan charges the Agency to measure *sustainable* environmental results. (See box below.) This category will tell us whether the results CBEP achieves are indeed sustainable. Like indicators of pollution prevention, these measures attempt to gauge CBEP's ability to prevent future environmental degradation. The Agency will use the two categories of sustainability measures described below. These measures will be tracked only in CBEP priority places and, because they are experimental in nature, may not be used for accountability purposes.

- **a.** Economic Measures of Sustainability. Measures under this category track changes in a community's economic policies, choices and behaviors that have a significant impact on environmental sustainability and CBEP efforts.
- **b.** Social and Cultural Measures of Sustainability. Measures under this category track changes in social and cultural values and choices at the community level that have a strong influence on environmental sustainability and CBEP efforts.

#	Action Item	Lead(s)	Date
15	Regional Offices, working with OPPE, will develop pilots for testing: CBEP measures and indicators; processes for tracking CBEP performance; and a system for CBEP reporting. The piloting Regions and OPPE will consult with OCFO, NPM and Regional CBEP Coordinators, and other performance measurement experts in the Agency. Upon completion of the pilots, the pilot group will submit a final report to the CLC with recommendations for measurement, tracking and reporting.	Regions 4, 5 and OPPE/OSEC	

16	Based on the pilot interim report, as well as conclusions of the OCFO-GPRA analysis (see Action Item 18), the CLC will recommend a process for tracking and reporting CBEP performance to senior EPA management, and will support implementation.	CLC	
17	All Regional and Program Offices will develop a set of activity measures of CBEP Performance. In addition, Regional Offices will develop place-specific environmental results and sustainability measures for each of their CBEP priority places.	All Regional and Program Offices	

• CBEP reporting will be coordinated with reporting for EPA's other place-based initiatives, programs and approaches.

Because CBEP projects often receive funding and resources from multiple Agency programs, they often face multiple reporting requirements. To avoid duplicate and over burdensome reporting requirements, the Agency will investigate options for reforming and consolidating, where appropriate, base program (and other efforts, such as environmental justice, brownfields, etc.) reporting requirements and feedback mechanisms for CBEP projects in ways that improve the quality of the information. More efficient reporting mechanisms will make it easier for the Agency's management to learn and adapt to the changing conditions and needs of communities within CBEP projects. (See Action Item 15.)

• CBEP Performance Measurement will be coordinated with and integrated into EPA's GPRA accountability system.

In addition to being a valuable management tool, performance measurement is mandated by Congress. Under the Government Performance and Results Act (GPRA), all Federal government programs and initiatives are being asked to measure progress and results toward achieving goals and objectives, as described in agencies' strategic plans. CBEP is a cross-cutting approach, however, and may not lend itself easily to program-specific tracking under a typical governmental accountability system. Nevertheless, EPA still must measure the environmental results attributed to the CBEP approach, as stated in EPA's Strategic Plan.

#	Action Item	Lead(s)	Date
18	EPA will determine how cross-cutting agency strategies, like CBEP and other place-based approaches, should be tracked and reported under GPRA's programmatic accountability system. CBEP performance tracking and reporting needs to be consistent with GPRA to minimize potential duplicate reporting and to ensure that results attributable to CBEP are accounted for.	OCFO, OR and OPPE	

• The Agency will develop and/or access data sources with information scalable to the local level, especially focusing on data that can be used to measure ecosystem health and environmental sustainability.

Because CBEP is place-based and focuses on ecosystem health and environmental sustainability in addition to EPA's traditional environmental media focus, the Agency will need to develop or access new kinds of data to support CBEP performance measurement. In many cases, data sources already may exist with state and local governments and nonprofit organizations, and EPA need only find the right data-sharing partners. In other cases, the Agency may need to develop strategies for collecting new types of data.

#	Action Item	Lead(s)	Date
19	EPA's IRM-CEIS CBEP workgroup (see Action Item 9), will provide advice on data needs for measuring CBEP performance, strategies to improve information collection, sharing and use, and funding needs for CBEP data collection. The group also will work to forge stronger information-sharing partnerships with external organizations (i.e., federal agencies, states, tribes, other governmental entities, non-governmental organizations, universities, and other information providers) to support CBEP performance measurement.	OIRM and OPPE/CEIS	

APPENDIX #1 EPA's Strategic Plan: Goals and Key Cross-Agency Programs

GOALS

1. CLEAN AIR:

The air in every American community will be safe and healthy to breathe. In particular, children, the elderly, and people with respiratory ailments will be protected from health risks of breathing polluted air. Reducing air pollution will also protect the environment, resulting in many benefits, such as restoring life in damaged ecosystems and reducing health risks to those whose subsistence depends directly on those ecosystems.

2. CLEAN AND SAFE WATER:

All Americans will have drinking water that is clean and safe to drink. Effective protection of America's rivers, lakes, wetlands, aquifers, and coastal and ocean waters will sustain fish, plants, and wildlife, as well as recreational, subsistence, and economic activities. Watersheds and their aquatic ecosystems will be restored and protected to improve public health, enhance water quality, reduce flooding, and provide habitat for wildlife.

3. SAFE FOOD:

The foods Americans eat will be free from unsafe pesticide residues. Children especially will be protected from the health threats posed by pesticide residues, because they are among the most vulnerable groups in our society.

4. PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES AND ECOSYSTEMS:

Pollution prevention and risk management strategies aimed at cost-effectively eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this nation.

5. BETTER WASTE MANAGEMENT, RESTORATION OF CONTAMINATED WASTE SITES, AND EMERGENCY RESPONSE:

America's wastes will be stored, treated, and disposed of in ways that prevent harm to people and to the natural environment. EPA will work to clean up previously polluted sites, restoring them to uses appropriate for surrounding communities, and respond to and prevent waste-related or industrial accidents.

6. REDUCTION OF GLOBAL AND CROSS-BORDER ENVIRONMENTAL RISKS:

The United States will lead other nations in successful, multilateral efforts to reduce significant risks to human health and ecosystems from climate change, stratospheric ozone depletion, and other hazards of international concern.

7. EXPANSION OF AMERICANS' RIGHT TO KNOW ABOUT THEIR ENVIRONMENT:

Easy access to a wealth of information about the state of their local environment will expand citizen involvement and give people tools to protect their families and their communities as they see fit. Increased information exchange between scientists, public health officials, businesses, citizens, and all levels of government will foster greater knowledge about the environment and what can be done to protect it.

8. SOUND SCIENCE, IMPROVED UNDERSTANDING OF ENVIRONMENTAL RISK, AND GREATER INNOVATION TO ADDRESS ENVIRONMENTAL PROBLEMS:

EPA will develop and apply the best available science for addressing current and future environmental hazards, as well as new approaches toward improving environmental protection.

9. A CREDIBLE DETERRENT TO POLLUTION AND GREATER COMPLIANCE WITH THE LAW:

EPA will ensure full compliance with laws intended to protect human health and the environment.

10. EFFECTIVE MANAGEMENT:

EPA will establish a management infrastructure that will set and implement the highest quality standards for effective internal management and fiscal responsibility.

EPA'S GUIDING PRINCIPLES

In addition to developing a set of goals, the Agency has developed a set of principles intended to guide senior management in making decisions about Agency priorities as well as provide a framework for ways in which the goals and objectives may best be reached in our day-to-day activities. The principles include:

- Reduce Health and Environmental Risks
- Emphasize Pollution Prevention
- Emphasize Children's Health
- Strengthen Partnerships
- Maximize Public Participation and Community Right to Know
- Emphasize Comprehensive Regional and Community-Based Solutions
- Place Emphasis on Indian Country
- Choose Common Sense, Cost-Effective Solutions

APPENDIX #2

CBEP Performance Measure Examples (Organized by CBEP Performance Measurement Categories)

These *examples* of performance measures are intended to improve the understanding of each measurement category. The examples **may** serve as a starting place for developing Region and place-specific measures, to be used like a menu -- a Region or priority place may select from each list those measures that are appropriate for them. Regions are not, however, limited by these examples in any way. The lists are **not** intended to be exhaustive. They do **not** reflect the "right" number of measures, **nor** do they define the scope and range of the categories.

- 1. **EXAMPLES OF CBEP ACTIVITY MEASURES.** Because it often takes years for environmental results to materialize, activity measures are necessary to gauge the level of CBEP implementation. These measures will tell us how much, and what kind of "CBEP" is happening.
- **a.** Reorienting EPA Programs for CBEP. This category should include measures of organizational change that improves EPA's ability to work across Program Offices and Regions, adopt multimedia approaches, develop effective partnerships, and deliver appropriate services to support CBEP activities. It also should include activities that develop EPA staff expertise in CBEP (e.g. training, hiring practices), as well as the development of CBEP tools for EPA use in communities.
 - breakdown of financial resources (e.g., grants/IAG, contract, travel) directed toward CBEP activities
 - hours of CBEP-related training for EPA staff and management
 - projects for which innovative organizational structures or cross-program or cross-division partnerships were established to accommodate cross-media work
 - partnerships developed with organizations outside of EPA to leverage resources and/or expertise
 - resources and expertise leveraged through established partnerships with organizations outside EPA
 - # of IPA's and details established for the specific purpose of supporting CBEP work
 - # of CBEP-related staff for whom CBEP duties have been included in the PERFORMS system
- **b. Building External Capacity.** This category should include measures of the availability and range of EPA's CBEP tools, customer satisfaction with those tools, as well as the diversity among types of stakeholders using the tools (e.g., states vs. community nonprofits).
 - # of users of selected CBEP tools (e.g., training, resources, informational materials)
 - customer satisfaction with EPA tools and information systems
 - # and characteristics of projects in which EPA initially took a lead, but later became community-led

- # of states entering into NEPPS agreements that include CBEP language and CBEP-related performance measures
- **c. Working in Priority Places.** This category should include the range and types of places in which EPA is working, the range and types of issues being addressed, and the extent to which the CBEP principles are being embraced in each project.
 - # and % of projects defined by geographic area, and the breakdown by type (e.g., political jurisdiction, subwatershed, watershed, ecosystem, ecoregion, etc.)
 - # and % of projects involving Federal, state/tribal, local govt. and community stakeholders
 - # and % of projects using a cross-media (i.e., air, water, waste and pesticides/toxics) approach
 - # and % of projects that involve economic and/or sociocultural goals
 - # and % of projects that pursuing goals that were established through a collaborative process involving stakeholders
 - # and % of projects focusing on each of a range of issues or landscapes (e.g., development issues, watershed restoration, Superfund site clean-up/restoration, threatened species, water quality and quantity, etc.)
- 2. **EXAMPLES OF ENVIRONMENTAL RESULTS MEASURES.** Measures of environmental results tell us whether the CBEP approach is advancing EPA's mission of protecting human health and safeguarding the natural environment. It often takes years before actual environmental results are realized and/or can be measured. Initially, therefore, this category may include process measures such as efforts to develop approaches for measuring environmental results (this might include, for example, the percentage of projects conducting a baseline environmental assessment to measure progress against). In the long run, however, if we are to demonstrate the tangible value added of CBEP, place-based projects should measure environmental results under the categories below.
- **a. EPA Program Office Environmental and Human Health Measures.** This category should include measures of progress toward EPA Program Office goals, such as air and water quality indicators, levels of soil and food contamination, etc.
 - Clean Air (Goal 1 under the GPRA EPA Strategic Plan)
 - -- emission reductions for each criteria air pollutant ^{2, 4}
 - -- changes in emissions of air toxics (organic and inorganic chemicals, heavy metals) ^{2, 4}
 - -- changes in # of people in clean air nonattainment areas 2
 - -- changes in average annual visibility impairment in national parks and wilderness areas ⁴
 - Clean and Safe Water (Goal 2)
 - -- population served by community drinking water systems violating health-based requirements ¹
 - -- population served by unfiltered surface water systems at risk from microbiological contamination ¹

- -- population served by community drinking water systems exceeding lead action levels ¹
- -- source water protection ¹
- -- fish consumption advisories ¹
- -- shellfish growing water classification ¹
- -- biological integrity ¹
- -- species at risk ¹
- -- wetland acreage 1
- -- water meeting designated uses for: drinking water supply, fish and shellfish consumption, recreation, aquatic life ¹
- -- ground water pollutants ¹
- -- surface water pollutants ¹
- -- selected coastal surface water pollutants in shellfish ¹
- -- estuarine eutrophication conditions ¹
- -- contaminated sediments ¹
- -- selected point source loadings in surface water, and sources of point source loadings through Class V wells to ground water ¹
- -- nonpoint source sediment loadings from cropland ¹
- -- marine debris ¹

Safe Food (Goal 3)

- -- changes in pesticide residues in ground water ²
- -- changes in number and level of pesticide residues found in food ²
- -- changes in pesticide use (agricultural, household, and commercial) ⁴

• Pollution Prevention and Reducing Risk... (Goal 4)

- -- % reduction in wastewater flows ³
- -- changes in hazardous waste generation ³
- -- changes in municipal waste per capita ⁴
- -- changes in indoor radon levels ³
- -- changes in blood lead levels ²
- -- changes in #s of pesticide-related illnesses ²

Better Waste Management and Restoration of Abandoned Waste Sites (Goal 5)

- -- changes in amount of hazardous waste managed by type of method ³
- -- number of brownfield properties cleaned up and converted to economic reuse ⁴
- -- changes in amount of solid waste landfilled, recycled, or incinerated ^{3,4}

- **c. Other Ecosystem Measures.** This category does not track single media pollutants that contribute to ecosystem degradation and poor human health, but rather the effects of pollution and other causes on the stability and viability of urban and natural ecosystems.
 - changes in plant and animal diversity (compared to a reference condition) ³
 - changes in population and/or health of selected "indicator" species ⁵
 - changes in degree and rate of fragmentation of ecosystem by types ⁵
 - changes in number of species experiencing reduced range ⁵
 - changes in number of native species (aquatic, terrestrial, plant) at risk ³
 - changes in % of river and stream miles designated as healthy using Biological Integrity Assessments ³
 - changes in number of fish kills and number of fish killed ³
 - changes in eutrophication conditions in estuaries, lakes and reservoirs³
 - changes in % of assessed water bodies with healthy biological communities ³
 - changes in average seasonal soil nutrient content by location ³
 - changes in biotic/ecosystem assessment indices (e.g. Index of Biotic Integrity) ³
 - changes in rate of topsoil loss per year ³
- 3. **EXAMPLES OF MEASURES RELATED TO SUSTAINABILITY.** Behaviors and choices at the individual and community level, and motivated by economic and social values, often have long-term environmental impacts, ultimately helping to determine whether or not future generations enjoy a healthy, stable environment. Measures of sustainability seek to capture changes in these behaviors and choices that move us toward or away from environmental sustainability.
- **a.** Economic Measures of Sustainability. This category should include measures of changes in economically-motivated activities that impact the environment, such as resource consumption, investment patterns, employment patterns and characteristics, transportation policy, and land use policy.
 - land use patterns
 - -- changes in land use/cover ³
 - -- changes in human migration and dispersal patterns ⁵ (also social)
 - -- changes in % of development within five minutes of stores, transit, etc. ³
 - -- changes in % of population living in urban areas ⁶ (also social)
 - -- changes in population density ⁵ (also social)
 - resource consumption and efficiency

- -- changes in energy consumption by use, per capita ³ (also social)
- -- changes in ratio of renewable resource energy extracted vs amount generated ³
- -- changes in # jobs dependent upon resource extraction ⁵ (also social)
- -- changes in materials use per capita; per output ⁵ (also social)
- -- changes in total and per capita water supply withdrawal ³
- -- changes in ratio of timber harvest to timber growth ⁵
- -- changes in ratio of amount of raw resources exported vs value added exports ⁵
- transportation
 - -- changes in vehicle miles traveled (VMT) per capita per year³ (also social)
 - -- changes in transportation fuel consumption per capita ⁵ (also social)
 - -- changes in modes of transportation to work ³ (also social)
 - -- changes in % of commuters living within 30 minutes of work ⁶ (also social)
- **b.** Social and Cultural Measures of Sustainability. This category should include measures of social and cultural values and activities that impact the environment, such as human settlement patterns, individual energy use, environmental justice, outdoor recreation, individual consumption, environmental awareness and governance, for example.
 - social equity and quality of life
 - -- changes in # and % of people exposed to toxins, and by ethnicity and income ⁵
 - -- changes in # and % of people with access to adequate sanitation, trash pick-up/disposal ³
 - -- changes in # and % of population served by wastewater treatment ³
 - -- changes in perceived quality of life
 - outdoor recreation opportunities
 - -- changes in % of population within ½-mile of green/open space ³
 - -- changes in miles of maintained walking, hiking, biking trails per 1000 residents ³
 - -- changes in # of people engaging in outdoor recreation
 - -- change in # and % of residents who consider their community beautiful
 - governance
 - -- changes in # of joint projects among municipal, county and state governments
 - -- changes in government spending on environmental issues ³
 - community capacity
 - -- changes in membership to environmental/conservation/wildlife organizations

- -- changes in # of public/private partnership efforts to protect the environment
- -- changes in # of participants in environmental volunteer activities
- -- changes in # and % of people who express pride in their community and environment
- environmental awareness
 - -- changes in amount of class time devoted to environmental curriculum in local schools
 - -- changes in # and % of residents who list environmental health as a component of a better quality of life
 - -- changes in # and % of environment-related articles in local media
 - -- changes in # of art exhibits/shows featuring nature, animals, etc.

Sources of Example Measures

Those examples that do not cite a specific source were developed by the Office of Sustainable Ecosystems and Communities drawing from the bodies of literature on performance measurement and indicators of sustainability.

- 1 USEPA, OW, Environmental Indicators of Water Quality in the United States. EPA 841-R-96-002.
- 2 USEPA, "Core Performance Measures for FY 1998, as developed by the National Program Managers in collaboration with State Environmental Commissioners." August 1997.
- 3 State Environmental Goals and Indicators Project, *Environmental Indicator Technical Assistance Series: Volume One -- Catalog of Environmental Indicators.* Florida Center for Public Management, Tallahassee, FL: October 1996.
- 4 USEPA, EPA Strategic Plan. September 1997.
- 5 Sustainable Development Indicators Group, "Proposed 1997 Sustainable Development Indicators: Indicators: Indicators Inventory." Interagency Working Group on Sustainable Development Indicators, Council on Environmental Quality: October 1996.
- 6 Hart, Maureen, Guide to Sustainable Community Indicators. Ipswich, MA: QFL/Atlantic Center for the Environmental, 1996.

APPENDIX #3 Glossary Of Terms

biological diversity (**biodiversity**) - Describes the variety of living organisms from all sources including, *inter alia*, terrestrial, marine, and other aquatic ecosystems and ecological complexes of which they are part. It includes diversity considered at all levels, from genetic variants within a species, to the variety among species and higher taxonomic levels, as well as the variety of ecosystems in which they live.[USAID Strategy for Biodiversity Conservation, 1995]

Brownfields initiative

community - In general, community includes components and attributes of social interaction, common ties, mutual satisfaction of needs and shared territory or place. More specifically, individuals may define and understand what is meant by community in any particular situation. As such, any "community" includes a variety of differing values, perceptions, priorities and complex inter-relationships around environmental protection as well as other community-based issues.

community-based environmental protection (CBEP) - EPA's term for a holistic and collaborative approach to environmental protection that brings together public and private stakeholders within a place or community to identify environmental and public health concerns, set priorities, and forge comprehensive solutions. Through CBEP, often called a place-based or ecosystem approach, stakeholders consider environmental protection along with human social needs, work toward achieving long-term ecosystem health, and foster linkages between economic prosperity and environmental well-being.

comparative risk - Generally, comparative risk refers to the process of estimating the risks (human health, ecological and/or quality of human life) of various environmental problems, and prioritizing the problems and their management based on the level of risk each poses. Comparative Risk at EPA also refers to a specific technical assistance program. Under the program, comparative risk is "a cross-media problem assessment and planning effort that can be applied at the federal, state, local or watershed level.... [T]he process brings together diverse stakeholders to reach consensus on which environmental problems pose the most risk to human health, ecosystem health and quality of life; and to develop consensus on an action plan to reduce those risks." ["EPA's Comparative Risk Projects: Bridging Science and Public Values." EPA, Regional and State Planning Division: June 1997.]

ecosystem - a dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting in a functional unit. [EPA's Agency-wide Strategic Plan. A New Generation Of Environmental Protection, July 1994]

Environmental Justice program

Geographic Information System (GIS)

Government Performance and Results Act (GPRA) - The GPRA is a statutory framework, enacted by Congress in 1993, to change and improve management of the Federal Government. GPRA seeks to shift the focus of federal management and decisionmaking away from a preoccupation with activities that are undertaken to a focus on the results of those activities as reflected in citizens' lives. Specifically, the Act requires executive agencies to prepare

multiyear strategic plans (including mission, goals and objectives, and strategies), annual performance plans, and annual performance reports. [*The Government Performance and Results Act: 1997 Governmentwide Implementation Will Be Uneven.* U.S. General Accounting Office (GAO/GGD-97-109): June 1997.]

holistic

multi-media

National Environmental Performance Partnership Systems (NEPPS)

nonpoint source

Regional Geographic Initiative (RGI)

risk assessment and risk management: Each environmental problem poses some possibility of harm to human health, the ecology, the economic systems, or the quality of human life. That is, each problem poses some environmental risk. Risk assessment is the process by which the form, dimension, and characteristics of that risk are estimated, and risk management is the process by which the risk is reduced. [Reducing Risk: Setting Priorities and Strategies for Environmental Protection. EPA Science Advisory Board, Washington, DC: September 1990.]

stakeholder - the variety of people interested in a particular place such as, individual residents and landowners, civic and religious organizations, businesses and industry associations, environmental and conservation groups, governmental agencies at all levels, and others.

sustainable communities - Sustainable communities are communities that pursue sustainable development (see definition below) at the local level. They are "cities and towns that prosper because people work together to produce a high quality of life that they want to sustain and constantly improve." [Sustainable America: A New Consensus for Prosperity, Opportunity, and a Healthy Environment for the Future. President's Council on Sustainable Development, February 1996.]

sustainable development - The most widely-used definition of sustainable development comes from the United Nations World Commission on Environment and Development, which is 1987, defined it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Beyond this no singular definition has emerged; however, there is consensus on its fundamental tenets: "a concern for sustainable development counsels long-term time horizons consistent with our responsibilities to others, recognition of the interdependence of the economy and the environment, and more comprehensive, integrated approaches to economic development and environmental protection." [Sustainable Development and the Environmental Protection Agency. EPA, Office of Policy, Planning and Evaluation (EPA/230-R-93-005), Washington, DC: June 1993.]

urban sprawl

watershed approach